Course Syllabus — Management 686  
Research Methods in Organizational Science II  
Fall, 2004  
Monday, 2:20-4:50pm, Room 4003 Wehner  

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Lecture notes and other course materials can be downloaded from Portal:  
http://maysportal.tamu.edu/

Course Description  

The goals of this course are threefold: (1) to provide an overview of basic and advanced research method tools for conducting micro, macro, and meso organizational research; (2) to develop critical skills needed to plan for and evaluate empirical organizational research; and (3) to develop skills of actually using various organizational research methods. Most importantly, I hope this course will teach students to think about theories in their content domain, research methods and design, and statistics as three inter-related components of a unified system through which theories are developed, tested, and refined. Simply put, theoretical and methodological competencies are not, and should not be, mutually exclusive.

In line with its goals, the course covers three general areas: (1) measurement (i.e., experimental and non-experimental operationalizations of constructs); (2) research design (both experimental and observational designs); and (3) statistics. These three topics will be covered at fairly high level, with greater emphasis on integration among the topics and application of the various methods and techniques than on technical and mathematical proficiency of the material. However, I expect students to be able to learn much more about the topics covered following the course. That is, I hope the course would provide students with the basic tools needed to learn more on their own about these and other research methods and techniques.

Grading:  

Grading will be based on exercises, a take-home final exam, and completion of a research paper. Although students will not be evaluated based on class participation, attendance is expected in all classes, and constructive participation in class discussions is highly encouraged. In total, students can earn up to 100 pts in the class, as follows:

1. Exercises: Students will be assigned 5 exercises throughout the semester, which are designed to help students master the various methods and techniques covered in the course. The exercises will require students to perform various data management and analyses of actual organizational data using SPSS. In addition, and equally
important, students will be asked to critically interpret results from analyses they conduct. Each exercise will be worth 10 pts, for a total of 50 pts.

2. **Take Home Final Exam:** Students will be given a set of 4 to 6 questions, and have a week to complete these questions. The questions will require students to critically think about and integrate among the topics covered in the course. Exams should be typed, and handed in as a set of 4-6 short papers. The final exam will be worth 20 pts.

3. **Final Research Paper and Presentation:** The major paper for the course will summarize an independent research project carried out over this and the previous two semesters. This should be the outcome of research proposed in Research Methods in Organization Science I. In addition to the actual paper, students will be asked to briefly present their completed research in class, similarly to how students might present their research in a conference (i.e., a 15 min presentation). The presentation will be worth a total of 10 pts., and the actual paper will be worth 20 pts, for a total of 30 pts.

**ALL WRITTEN ASSIGNMENTS MUST BE SUBMITTED VIA THE PORTAL SYSTEM**

**Assigned Texts and Readings:**

There are two assigned texts (P&S and SC&C – see below). In addition to the P&S and SC&C texts, several journal articles and book chapters will be assigned throughout the course. Some of the assigned readings provide technical background for the material covered, while others illustrate the application of the material in actual organizational research. Students are required to read various chapters and articles PRIOR to the class for which they are assigned. Students are also encouraged to purchase the Field (2002) book, to help with SPSS data analyses and interpretations. Lectures and class discussion will assume that students have read all assigned material prior to class – it is your responsibility to keep up with the readings.


Tentative Course Schedule

Note: SC&C = Shadish, Cook, & Campbell; P&S = Pedhazur & Schmelkin

1. August 30: Introduction

Assigned readings:
P&S, Ch 1
SC&C, Ch 1

2. September 6: Validity in experimental designs

Assigned readings:
SC&C, Ch 3 & 4

3. September 13: Validity in observational designs

Assignment due: Exercise#1 (dataset manipulations)

Assigned readings:
P&S, Ch 3 & 4
4. September 20: Reliability theory

**Assigned readings:**
P&S, Ch 2 & 5

5. September 27: Factor analysis

**Assigned readings:**
P&S, Ch 8 & 22

6. October 4: Review of ANOVA and regression (the General Linear Model)

**Assignment due:** Exercise#2 (factor analysis and reliability)

**Assigned readings:**
P&S, Ch 17 & 18
- SC&C Ch 4, 5 & 8

7. October 11: Regression with categorical predictors

**Assigned readings:**
P&S, Ch 19 & 20

8. **October 18: Logistic regression**

*Assigned readings:*


9. **October 25: Moderated regression**

*Assignment due: Exercise#3 (Regression with categorical IVs and DVs)*

*Assigned readings:*

P&S, Ch 19


10. **November 1: Mediated regression**

*Assigned readings:*


11. November 8: Multilevel analysis: Overview and aggregation

*Assignment due:* Exercise#4 (mediated and moderated regression)

*Assigned readings:*

12. November 15: Multilevel analysis: Cross-level tests

*Assigned readings:*

13. November 22: Multilevel analysis: Growth modeling

*Assigned readings:*


14. November 29: Class Presentations

15. December 6: Meta-Analysis

*Assignment due:* Exercise#5 (Multilevel analyses)

*Assignment due:* Research Paper

*Note: Final Exam Handed Out*

*Assigned readings:*


16. December 14: Final Exam Due

*Assignment:* Hand in final exam paper by no later than 12 noon, in Gilad’s mailbox.